

rejected this on the grounds that (para. 5 of Gilbert's comment) '...[it] is an obscure fish that is of little direct economic importance. The scientific name thus seldom appears in the non-scientific literature.' This is simply unacceptable.

It seems that the chief objection to the application to conserve *stramineus* relates to its timing (paras. 1 and 3 of Carter et al.). I am, of course, responsible for the long delay in its completion and I apologize. However, my intention to file a petition was announced early (Robins et al., 1991, p. 177) and was well recognized by the ichthyological community (see Etnier & Starnes, 1993). Several of the cited uses of *ludibundus* are casual and relatively obscure.

The points made in paras. 7 and 8 of the comment by Carter et al. are interesting but have no direct relevance to Case 3131.

The continued usage of the established and familiar name *N. stramineus* is at risk. It must be recognised that information on the species in the literature until 1989 will be retrieved under the name *stramineus*; only after then have some works used *ludibundus*. The interests of stability and universality in nomenclature are thus best served by use of *stramineus* in place of the unused (until 1989) synonym *ludibundus*. I therefore commend my application to the Commission and urge, under Article 23.9.3 of the Code, that they approve it.

Comments on the proposed conservation of usage of the names *Mystacina* Gray, 1843, *Chalinolobus* Peters, 1866, *M. tuberculata* Gray, 1843 and *C. tuberculatus* (J.R. Forster, 1844) (Mammalia, Chiroptera)
(Case 3095; see BZN 56: 250–254; 57: 117–118)

(1) Gregory C. Mayer

Department of Biological Sciences, University of Wisconsin Parkside, 900 Wood Road, Kenosha, WI 53141, U.S.A.; University of Wisconsin Zoological Museum, 250 North Mills Street, Madison, WI 53706, U.S.A.

John A.W. Kirsch

University of Wisconsin Zoological Museum, 250 North Mills Street, Madison, WI 53706, U.S.A.

1. Spencer & Lee have requested that the Commission should prescribe the nomenclature of the two extant species of bats of New Zealand. Our own analysis of this situation (Mayer, Kirsch, Hutcheon, Lapointe & Gingras, 1999) leads us to a different conclusion, requiring no action by the Commission, viz. that as George Forster is properly the author of *Vespertilio tuberculatus* there is no '*Mystacina tuberculata* Gray, 1843' and the specific name of the Lesser New Zealand Short-tailed Bat must be *velutina* Hutton, 1872, the first name available. Spencer & Lee's proposal does not, in its present form, lead to a stable or unambiguous nomenclature, and does violence to the principle, increasingly embodied in the Code, that authors should be able to resolve most nomenclatural questions without reference to the Commission. Our analysis follows from the clear and simple constraint of Article 50.1.1 that attention be restricted to the content of the publication concerned. Employing the evidence it permits us to use, the Code and the evidence of the publication entrain a course of nomenclatural action which leads to universality and stability.

2. We find much of Spencer & Lee's account of the nomenclatural history cogent. In particular, we entirely agree with them that, contrary to Hill & Daniel (1985), only one species-group name for bats is made available in Gray's zoological appendix to Dieffenbach (1843). We disagree about who is the author of this name: Spencer & Lee contend it is Gray, while we find it to be G. Forster. Our belief is based on a strict interpretation of Article 50.1.1: 'if it is clear from the contents that some person other than an author of the work is alone responsible both for the name ... and for satisfying the criteria of availability other than actual publication, then that person is the author of the name.' The form of citation used by Gray on page 181, citing G. Forster both after the name and at the conclusion of the description, creates a *prima facie* case for treating Forster as the author of the name. Further examination of the work shows that Gray used a different format when proposing new names he attributed to himself; significantly, this includes a case where his name and description is based on a drawing (see para. 3 below). Thus, following the admonition of Article 50.1.1 to limit our attention to the contents of the publication, G. Forster is the author of the name *tuberculatus*. We are not the first to attribute authorship of the description on page 181 to G. Forster — Sherborn (1931, p. 6670) did so explicitly, as, apparently, did Dwyer (1962).

3. Although not admissible evidence in determining authorship under Article 50.1.1, we also examined the historical circumstances surrounding the name. The most important results of this examination are that Gray never attributed authorship of the specific name to himself; that attempts to attribute the conditions of availability to Gray by suggesting he described George's drawing fail on the grounds that the description does not correspond to the drawing; and that manuscript materials by the Forsters, now lost but known to have existed, might plausibly have been an additional source of information. Detailed documentation of the points in this paragraph and para. 2 may be found in our 1999 paper, especially in the quotations on pp. 472 and 475, the reproduction of George Forster's drawing in Fig. 1, and in the section entitled 'Whose words are they?' on pp. 479–481.

4. If, as we maintain, George Forster is the author, then strict application of the rules (including the lectotype and type species designations in our 1999 paper), leads to the maintenance, in their familiar applications, of the family name MYSTACINIDAE, the generic names *Mystacina* and *Chalinolobus*, the species names *Chalinolobus tuberculatus* and *Mystacina robusta* (the latter for the extinct Greater New Zealand Short-tailed Bat), and the subspecific names *aurorica* Hill & Daniel, 1985 and *rhyacobia* Hill & Daniel, 1985 of the Lesser New Zealand Short-tailed Bat. The only change required by a strict application of the rules is the revival of the specific name *velutina* Hutton, 1872 for the Lesser New Zealand Short-tailed Bat; this specific name was also used for this bat by Thomas (1905). All of these names have a firm basis in types and/or type localities.

5. The analysis in our previous (1999) paper was completed before the full text of the 4th edition of the Code became available. We had, however, access to certain of the changes, and we applied the provisions of the new Article 70. With the full text now before us, we note two provisions which are relevant to our analysis; fortunately, they do not lead to a change in our conclusions. First, given that the effective date of the 4th edition is 1 January 2000, while our paper was published on 17 September 1999, we here restate our designation under the new Article 70 of the type species of

Mystacina Gray, 1843, so that there can be no question of its chronological applicability. We hereby designate the zoological species before Gray, the valid specific name of which we believe to be *velutina* Hutton, 1872, as the type species of *Mystacina* Gray, 1843 (see pp. 482–483 of our 1999 paper). Second, a new provision, Article 50.6, requires that usages of a name published simultaneously with its first proposal be considered as competing claims to authorship of the name, and that authorship is to be determined by the first reviser principle. We regard this provision as problematic, because it turns some common practices (e.g. symposium volumes or collected papers where a non-taxonomist uses names established in the same volume, often because the editor wants to bring nomenclatural uniformity to the collection) into a source of nomenclatural instability and uncertainty, and because it seems to clearly contravene the provisions of Article 50.1 that authorship be determined from the contents of the publication. Article 50.6's requirement that usages concern the same taxonomic taxon is also not without problems — a taxonomic taxon is defined, in part, by included specimens, yet the example given in Article 50.6 explicitly notes that the authors in the example studied different specimens. Nonetheless, we can apply this new provision to the present case. Under Article 50.6, G. Forster and Gray are in contention for authorship, to be decided by the first reviser. Our previous paper considered this very point of contention, and concluded (as we still do) that G. Forster was the author. Our conclusion was based on the evidence of the publication (as required by Article 50.1), and not by the arbitrary choice allowed to a first reviser, but the basis of the choice is irrelevant. Previous authors on the nomenclature of New Zealand's bats (e.g. Dobson, 1878; Thomas, 1905; Dwyer, 1962; Hill & Daniel, 1985) do not qualify as first revisers because they did not, as required by Article 24.2.1, state the simultaneous actions and select from among them, but rather considered there to be but one author (Gray), or two actions which need not be selected among (two names authored by Gray, or one by Forster and one by Gray). We can thus meet the provisions of Article 50.6 without having to alter our nomenclatural conclusions.

6. Spencer & Lee rightly realize that if Gray is the author, then the syntypical series of *Mystacina tuberculata* is composite, consisting of the Long-tailed Bat drawn by George and the two specimens of Short-tailed Bats seen by Gray. The real threat to stability of nomenclature is the composite nature of *Mystacina tuberculata* sensu Gray, not the revival of *velutina*. As we detail in our paper, the familiar usages of the names mentioned in para. 4 are all potentially threatened (see especially the sections entitled 'Dobson's view' and 'Thomas's view'; these authors (1878 and 1905 respectively) came to opposite conclusions as to which part of the composite the name applied). Unfortunately, Spencer & Lee's request does not eliminate these threats to stability, because they do not designate a lectotype nor ask the Commission to fix a name-bearing type, under the misapprehension that the distinctiveness of the species obviates the need to determine to which of the two species the name applies. Their request thus leaves the application of the name unsettled.

7. Despite not designating a lectotype, Spencer & Lee clearly do not want the name fixed on the bat depicted in George Forster's drawing. We agree that doing so would have effects most unfortunate for nomenclatural stability. Designating one or another of Gray's 1843 specimens as the lectotype would be an improvement, but neither has definite locality, nor is definitely known to be extant (see discussion of this point by Hill & Daniel, 1985, and in our previous paper); doing so would lead to

uncertainty in the subspecific taxonomy of the Lesser New Zealand Short-tailed Bat, and even as to which kind (species or subspecies) of Short-tailed Bat the name applies (Gray's remarks on page 296 of the appendix to Dieffenbach are diagnostic of the genus only). Under our view, the name *tuberculatus* is not composite, and its type is unambiguously the New Zealand Long-tailed Bat drawn by George Forster.

8. The request of Spencer & Lee does not achieve stability; if implemented in its present form, it could lead to difficulties surpassing those it is intended to remedy. To achieve their ends, the Commission must declare Gray to be the author of *Mystacina tuberculata*, published on pages 181 and 296 of his appendix to Dieffenbach, and also fix a name-bearing type. This type should not be any of the syntypes, but a Lesser New Zealand Short-tailed Bat from within the range of *Mystacina tuberculata tuberculata* sensu Hill & Daniel (1985). In addition, *Vespertilio tuberculatus* J.R. Forster, 1844 must be declared exempt from Article 49 (see para. 9), to ensure its validity (placing a name on the Official List, as requested by Spencer & Lee, merely makes a name available; it does not ensure its validity [Article 80.6].) If Action 2 requested by Spencer & Lee is revised as here indicated, then their Actions 1, 3, and 4 are unnecessary.

9. Spencer & Lee briefly consider the possibility that Article 11.6 (concerning publication in synonymy) or Article 49 (on misapplication of species-group names) might apply. They dismiss the relevance of Article 11.6 as 'contrived', and we agree. The species-group name *tuberculatus* on page 181 of Dieffenbach is not a junior synonym (Article 11.6) of the name on page 296; it is the same name. And, even if it were a synonym, it could not possibly be junior, as it is published in the same work, and thus not possibly later established (Glossary). It is less clear to us that Article 49 does not apply, and thus that, under Spencer & Lee's interpretation that Gray is the author, use of the specific name *tuberculatus* for the New Zealand Long-tailed Bat would be barred, unless the Commission suspends application of this article. Failure to suspend would entrain a change in a specific name, precisely the sort of alteration Spencer & Lee wish to avoid.

10. We have used Article 50 to determine authorship, Articles 23 and 49 to determine availability and validity, Article 72 to typify a specific name, and Article 70 to typify a generic name. In all cases where the Code allowed a choice to be made, we have made the choice which maximizes the stability and universality of nomenclature. None of this makes a difference, of course, if the Commission uses its plenary power to establish a nomenclature by fiat. It is, however, contrary to the spirit of self-sufficiency encouraged by the Code to refer to the Commission cases which may be resolved by strict application with minimal effects on stability. It is even more in conflict with the recent direction of the Code, which stresses that authors should be able to adjudicate remedies in a way that maximizes stability and universality without reference to the Commission (e.g., the revisions to Article 70).

11. Current usage is not synonymous with universality and stability. Long-term stability and universality are achieved on a basis of definite typification and unambiguous application. Our interpretation leads to definite typification and unambiguous application of names by strict application of the Code. Spencer & Lee's request achieves neither stability nor universality, nor definite typification and unambiguous application. The revision of their proposal we sketch in para. 8 achieves these goals only through arbitrary use of the plenary power, and would involve the Commission in the search for an appropriate name-bearing type.

12. Accordingly, we ask the Commission to take no action in this case, but rather to let the rules be strictly applied.

Additional references

- Dwyer, P.D. 1962. Studies on two New Zealand bats. *Zoology Publications from Victoria University of Wellington*, 28: 1–28.
- Sherborn, C.D. 1931. *Index animalium ... Sectio secunda*, part XXVI, pp. 6359–6582. British Museum, London.

(2) Hamish G. Spencer

Department of Zoology, University of Otago, P.O. Box 56, Dunedin, New Zealand

Daphne E. Lee

Department of Geology, University of Otago, P.O. Box 56, Dunedin, New Zealand

We cannot agree with the interpretation put forward by Mayer & Kirsch in their comment above, even though (as they note) we agree about much of the history of the case. In particular, because of their unnecessary changing of the name of the Short-tailed Bat, their interpretation does not lead to nomenclatural stability, in spite of their claim to the contrary. Here we briefly reiterate the main points in our application.

The description (of two specimens of the Short-tailed Bat) on p. 281 of the 1843 work is manifestly by Gray alone, and that on p. 181 (of what is now known to be the other species) is, as everyone agrees, in his words. Thus, although Gray attributed the name *tuberculatus(-a)* to George Forster's unpublished painting, under Article 50.1 the author must be Gray. Taking the 1843 work as a whole, as one must, *Mystacina tuberculata* was adopted by Gray as the name for what he considered to be only one species. It is difficult indeed to see how Mayer & Kirsch can contend, unlike other authors of the past century, that there is no such name as *Mystacina tuberculata* Gray. The nominal species *M. tuberculata* Gray, 1843 is the type species of *Mystacina* by original designation, and also by monotypy even though it is now known to have been originally composite. Hutton (1872) replaced the wrong name, because, unknown to him, the mystacine's name was published one year before J.R. Forster's posthumous description (1844) of the Long-tailed Bat as *Vespertilio tuberculatus*. We do not propose the designation of neotypes for either nominal species because we see no taxonomic need for them.

To prevent a possible future objection (see para. 12 of our submission and paras. 8 and 9 of the comment by Mayer & Kirsch), we add to our previous proposals (BZN 54: 253) a request that the Commission should use its plenary power to rule that the specific name of *Vespertilio tuberculatus* (now *Chalinolobus tuberculatus*) J.R. Forster, 1844 is not invalid under Article 49 of the Code as a consequence of the application to that taxon (in part) of the specific name of *M. tuberculata* by Gray (1843). We believe that our proposals, which preserve all names in their long-established usage, are in accord with the Code; the interpretations of Mayer & Kirsch are not, and furthermore they involve the introduction of the name *Mystacina velutina* for the Short-tailed Bat.